(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification[7]:　　G06T 9/00

(21) International Application Number:
　　　　　　　　　　PCT/HU2004/000055

(22) International Filing Date:　20 May 2004 (20.05.2004)

(25) Filing Language:　　　　　　　　　Hungarian

(26) Publication Language:　　　　　　　　English
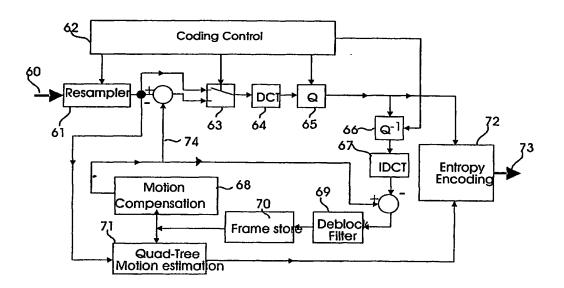
(30) Priority Data:
P0301368　　　　20 May 2003 (20.05.2003)　HU

(71) Applicant (for all designated States except US): AMT ADVANCED MULTIMEDIA TECHNOLOGY AB [SE/SE]; Box 102, S-374 22 Karlshamn (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TOTH, Peter [HU/SE]; Lärkvägen 20, S-374 50 Asarum (SE). KÁROLY, József [HU/SE]; Petreplan 9B, S-293 32 Olofström (SE).

(74) Agent: BOKOR, Tamás; S.B.G. & K. Patent and Law Offices, Andrássy út 113., H-1062 Budapest (HU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(54) Title: HYBRID VIDEO COMPRESSION METHOD

(57) Abstract: The invention concerns a method for compressing a digitally coded video frame sequence. In the method, a given frame is divided into blocks, and the information content of selected blocks is modified, relying on information contained in a neighbouring block or blocks (prediction), and the blocks are converted from spatial representation into frequency representation. The information content of the transformed blocks is encoded by arithmetic coding. The efficiency of the coding is improved by various methods, such as dynamically partitioning the blocks into sub-blocks, or performing a compressibility analysis is the blocks before carrying out further transformations. The entropy coding uses a neural network to determine the parameters of the arithmetic coding. The frames are dynamically re-scaled, depending on available bandwidth and quality of the coded image.

WO 2004/104930 A2

WO 2004/104930 A2